

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau(43) International Publication Date
10 June 2004 (10.06.2004)

PCT

(10) International Publication Number
WO 2004/048886 A1(51) International Patent Classification⁷: **G01B 9/02**, 11/30(21) International Application Number:
PCT/GB2003/005080(22) International Filing Date:
21 November 2003 (21.11.2003)

(25) Filing Language: English

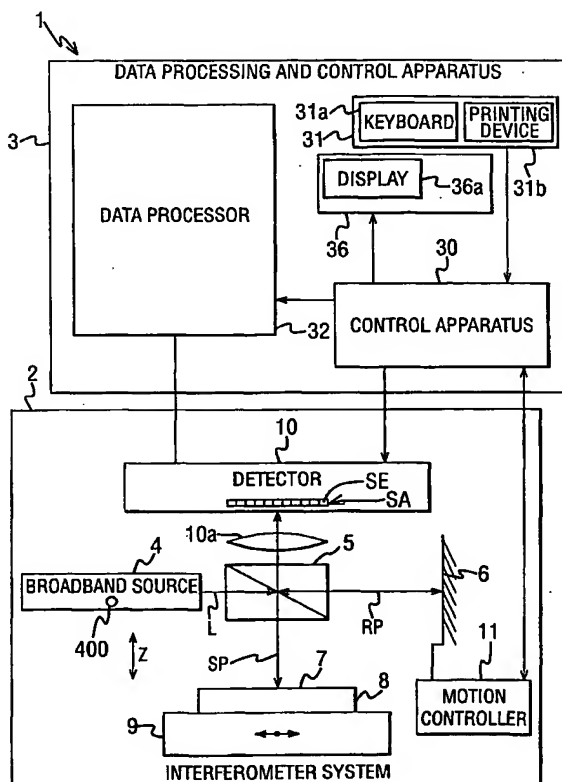
(26) Publication Language: English

(30) Priority Data:
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ford & Co., 16 High Holborn, London WC1V 6BX (GB).(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A SURFACE PROFILING APPARATUS

(57) **Abstract:** Light is directed along a sample path to-
wards the sample surface and along a reference path to-
wards a reference surface such that light reflected by the
sample surface and light reflected by the reference surface
interfere. Relative movement is effected between the sam-
ple surface and the reference surface along a measurement
path and the light intensity resulting from interference be-
tween light reflected from the reference surface and regions
of the sample surface is sensed at intervals along the mea-
surement path to provide a number of sets of light intensity
data values with each light intensity data value representing
the sensed light intensity associated with a corresponding
one of said regions. The sets of light intensity data are pro-
cessed to determine a position along the measurement path
at which a predetermined feature occurs in the light inten-
sity data for each sensed region and to enhance image data
representing the intensity data to facilitate the detection by
a user of the interference fringes.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— *with international search report*